Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An image processing method ~~for performing a projection transformation on a captured image,~~ of an image processing device in which a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions, the method comprising:

a region setting step for ~~setting first regions by~~ carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction, wherein the above step is performed by a processor. ~~an image obtained subsequent to transformation of the captured image by lines parallel to a horizontal axis and a vertical axis passing through an origin; and~~

~~a transformation step for transforming second regions prior to the transformation of the image, which correspond to the first regions set by the processing of the region setting step, into the first regions by a projection transformation, characterized in that the first regions are set by the processing of the region setting step so that the first regions do not contain the horizontal axis or vertical axis.~~

2. (Currently Amended) The image processing method according to claim 1, ~~characterized in that~~ wherein the region setting step comprises:

a first setting step for carrying out the partitioning at a default size; and

a second setting step for further partitioning first regions set in the first setting step when the first regions contain the straight line passing through the origin in the

horizontal direction or the straight line passing through the origin in the vertical direction, so that neither of the straight lines is contained.

~~the first regions which contain at least either the horizontal axis or vertical axis when set at a default size by the processing of the region setting step are further divided so that the first regions do not contain either the horizontal axis or the vertical axis.~~

3. (Currently Amended) The image processing method according to claim 1, ~~characterized in that~~wherein the region setting step comprises:

a first setting step for carrying out the partitioning at a default size; and

a second setting step for changing the size of all the first regions set in the first setting step when any of the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that all the first regions do not contain the straight lines.

~~in cases where the first regions that contain at least either the horizontal axis or the vertical axis exist when set at the default size by the processing of the region setting step, the sizes of all of the first regions are altered so that no horizontal axis or vertical axis is contained in any of the regions.~~

4. (Currently Amended) An image processing device for partitioning a whole image region containing image data after a projection transformation into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions, the device comprising:

region setting means for carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction; and

transformation means for carrying out a project transformation in each region.~~for performing a projection transformation on a captured image, comprising:~~

~~region setting means for setting first regions by partitioning an image obtained subsequent to transformation of the captured image by lines parallel to a horizontal axis and a vertical axis passing through an origin; and~~

~~transformation means for transforming second regions prior to the transformation of the image, which correspond to the first regions set by the processing of the region setting step, into the first regions by a projection transformation,~~

~~characterized in that the region setting means sets the first regions so that the first regions do not contain the horizontal axis or vertical axis.~~

5. (Currently Amended) A computer-readable medium storing an executable program, when executed, causing a computer to execute a process in which a whole image region containing image data after a projection transformation is partitioned into a plurality of regions by partitioning lines in a horizontal direction and a vertical direction in order to carry out a projection transformation in each of the regions, the executable program comprising:

a region setting step for carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction.~~A program for causing a computer to execute processing that performs a projection transformation on a captured image, comprising:~~

~~a region setting step for setting first regions by partitioning an image obtained subsequent to transformation of the captured image by lines parallel to a horizontal axis and a vertical axis passing through an origin; and~~

~~a transformation step for transforming second regions prior to the transformation of the image, which correspond to the first regions set by the processing of the region setting step, into the first regions by a projection transformation, characterized in that~~

~~the first regions are set by the processing of the region setting step so that the first regions do not contain the horizontal axis or vertical axis.~~

6. (New) The image processing device according to claim 4, wherein the region setting means comprises:

a first setting means for carrying out the partitioning at a default size; and

a second setting means for further partitioning first regions set in the first setting means when the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that neither of the straight lines is contained.

7. (New) The image processing method according to claim 4, wherein the region setting means comprises:

a first setting means for carrying out the partitioning at a default size; and

a second setting means for changing the size of all first regions set in the first setting means when any of the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that all the first regions do not contain the straight lines.

8. (New) The executable program according to claim 5, wherein the region setting step comprises:

a first setting step for carrying out the partitioning at a default size; and

a second setting step for further partitioning first regions set in the first setting step when the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that neither of the straight lines is contained.

9. (New) The executable program according to claim 5, wherein the region setting step comprises:

a first setting step for carrying out the partitioning at a default size; and

a second setting step for changing the size of all first regions set in the first setting step when any of the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that all the first regions do not contain the straight lines.